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Nuclear Power: Centre Stage at COP28

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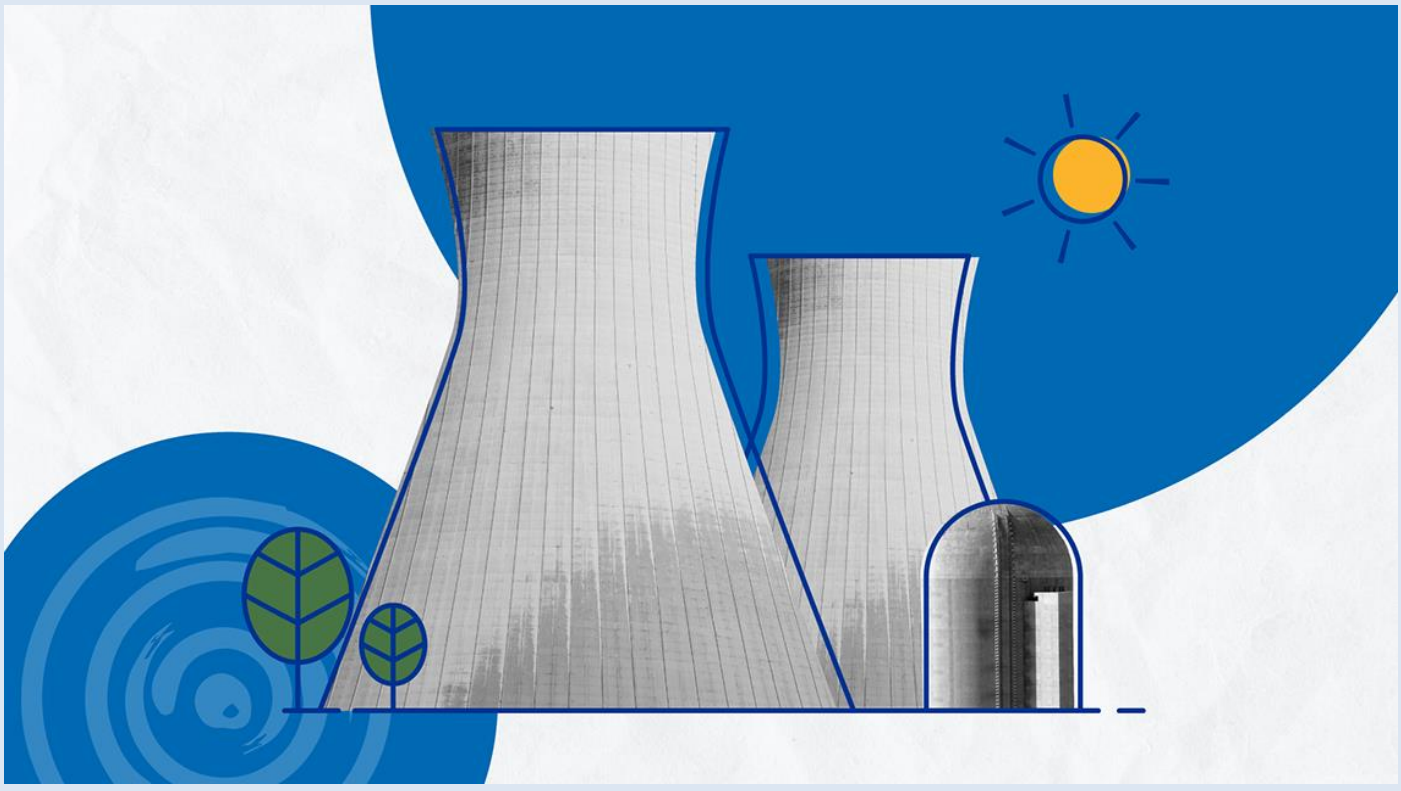

Source: International Atomic Energy Agency

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The 28th meeting of Conference of Parties, COP28, an annual gathering of the United Nations Framework Convention on Climate Change (UNFCCC), started on 30th November this year. Over 70,000 delegates will interact in these 13 days of interaction in Dubai, which is hosted by the United Nations. Representatives from nearly 200 countries will come up to form policies and take steps to assess and deliberate the goal of limiting the increasing average global temperature. The International Energy Agency (IEA) report has recognised that "Increasing renewables capacity threefold is the single largest driver of emissions reductions to 2030 in the Net Zero Emissions by 2050 Scenario (NZE Scenario)." [1]

The 'Global Stock Take' (GST) is going to be the leading theme this year.[2] During COP24 in Poland (2018), it was agreed that 'Climate Mitigation, Adaptation and Means of Implementation' would be the three major areas the GST will be addressing. It will take place every five years to evaluate collective progress towards achieving the purpose of the agreement in a comprehensive and facilitative manner. It was divided into a three-step process of data collection, technical assessment and, finally, the synthesis of the reports as the last stage. So, the vision for this year will be based on a synthesis report and summary of those data findings. This can be called a significant political phase after the completion of the scientific phase of data collection and technical assessment. The World Resources Institute considers this as a critical stage in how countries will determine and politically respond to the gaps and opportunities identified in the report.[3] Moreover, the annual assessment of the emission gap report is going to be the most robust analysis of where the greenhouse gas emissions are heading under current policies.

According to a report from the United Nations Environment Program (UNEP), the possibilities to limit global warming to 1.5 degrees Celsius is only 14 per cent, and there are chances that global warming will exceed 2 degrees Celsius.[4] Therefore, global emissions will need to drop by more than a quarter in the coming years. Furthermore, the IEA says, "The gap between rhetoric and action needs to be closed for pledges to reach net-zero emissions by 2050 and limit the rise in global temperatures to 1.5°C. Bolder action is necessary this decade. By 2030, the capacity of global renewable power should triple".[5]

Reducing fossil fuel dependency, increasing production of clean energy, maximising energy efficiency and providing support to financially vulnerable nations facing the severe effects of climate change, accelerating the use of clean energy will be the core areas being addressed in COP28. In this framework, nuclear energy is seen as a key to achieving these goals. The nuclear communities

will play a crucial role by actively engaging with policymakers to intensify global support for nuclear energy, grapple with financial access, and expand capacity for new builds.

Interestingly, the IEA, the World Energy Council, the UN Intergovernmental Panel on Climate Change, and the Massachusetts Institute of Technology have all produced reports that say that nuclear energy, as a source of base-load *and* low-carbon electricity, needs to be part of the solution not only for climate change but also for sustainable development.[6] The United States is going to lead the negotiation in the declaration to triple the amount of globally installed nuclear power capacity by 2050. International financial institutions such as the World Bank, Asian Development Bank, etc., would be engaged to include nuclear energy in their upcoming policies. These engagements will be followed by a nuclear industry commitment to triple generation over 2020 levels, sources state. Therefore, commitments to expand nuclear power could be seen as an important outcome of this conference.

Countries are looking towards nuclear power along with other sources of clean energy to achieve carbon neutrality and take evident steps for energy security as well. India's unwavering commitment to sustainable energy transition plan 'From G20 to COP28' was appreciated by Dr Sultan bin Ahmed Al Jaber, who is the COP28 President-designate, Minister of Industry and Advanced Technology.[7] During its G20 presidency, India successfully attempted to address the major issue of financial dearth which is one of the setbacks for developing countries. The New Delhi Leaders Declaration acknowledged the need for US $5.9 trillion till 2030 for developing countries for its NDCs (Nationally Determined Contributions) and US $4 trillion each year for clean energy technologies to meet zero-emission goals. This accounts for US $34 trillion by 2030.[8] This points to the huge difference from the mere billions being discussed so far in the global climate conversation. Developed countries have signed off on trying to raise these funds at the time of a global inflation period and the ongoing Ukraine war. So, the fundamental difficulty in the climate task is the nebulous talk over the responsibility sharing of climate investments. Therefore, for attaining the goal of decreasing greenhouse gas emissions or carbon neutrality, future meetings and brokering of agreements are supposed to emphasise on the collective decision over decarbonisation policies, revised mitigation goals and clear evaluation to address the limitations in achieving 'well below' 2 degrees Celsius target in the big picture.

Given, India is ambitious to increase its nuclear energy production three times in 10 years to contribute towards clean energy productions to meet development goals and climate change obligations.[9] India has outlined a bold vision for a decarbonised future through adopting and

escalating nuclear energy productions. At COP28, India should take the advantage of the significant international treaties that favour nuclear energy. These steps will not just help India directly to foster its nuclear energy production goals but also bring the opportunities to engage and collaborate with other countries for the fuel imports and technology exchanges. India will emphasise its energy transition vision through cooperation and partner with multilateral organisations. These efforts will boost Indian nuclear energy development and lead to achieve the goal of replacing carbon-based sources of energy to clean safe and reliable energy.

NOTES:

[1] United Nations, "Global Stocktake", https://unfccc.int/topics/global-stocktake. Accessed on November 23, 2023.

[2] World Resources Institute, "Benchmarks for Success for COP28", November 2, 2023, https://www.wri.org/insights/cop28-benchmarks-success. Accessed on November 25, 2023.

[3] Navina Sadasivam, "The world is careening toward 3 degrees of warming, UN says ahead of climate conference," *Grist Magazine,* November 2023, p.4.

[4] "Energy and Environment", *World Nuclear News*, https://www.world-nuclear-news.org/Articles/IEA-sees-greater-role-for-nuclear-in-attaining-net. Accessed on November 23, 2023.

[5] International Energy Agency.

[6] "India's Green Energy Commitment Hailed At COP28 Forum", *Outlook Planet*, November 13, 2023, https://planet.outlookindia.com/news/india-s-green-energy-commitment-hailed-at-cop28-forum-news-416290. Accessed on November 23, 2023.

[7] Archana Chaudhary, "The G20 Delhi Declaration Set the Climate Finance Agenda For COP28", *The Diplomat,* September 14, 2023, https://thediplomat.com/2023/09/the-g20-delhi-declaration-set-the-climate-finance-agenda-for-cop28/. Accessed on November 22, 2023.

[8] Ibid.

[9] "Energy and Environment", *World Nuclear News,* https://www.world-nuclear-news.org/Articles/India-long-term-development-strategy-sees-nuclear. Accessed on December 5, 2023.